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On the difficulty of investing sustainably in the future. And how it can be done

Plus postscript:

Future investments in the in times of the Corona pandemic

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On the difficulty of investing sustainably in the future. And how it can be done
Plus postscript: Future investments in the in times of the Corona-pandemic

Michael Thöne*

This discussion paper is the English version of the FiFo DP 20-02 „Von der Schwierigkeit, tragfähig in die Zukunft zu investieren. Und wie es doch zu schaffen ist. Plus Nachbemerkung: Zukunftsinvestitionen in Zeiten der Corona-Pandemie."

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Michael Thöne

On the difficulty of investing sustainably in the future. And how it can be done

Opening lecture at the 2020 New Year's Conference of the Green Academy, Heinrich Böll Foundation Berlin on 14 February 2020[1]

Plus postscript of 20 March 2020:

Future investments in the in times of the Corona-Pandemic

Bild: CC BY-SA 3.0: https://upload.wikimedia.org/wikipedia/commons/8/83/Soda_Frohlinde.jpg. (Farben nachbearbeitet.)
Die „So-da-Brücke" von 1978 bei Castrop-Rauxel Frohlinde.

[1] This talk was delivered on 14 February 2020 in Berlin under the title "Investments in Economic and Political Perspective: Between Fiscal Responsibility and Social Demand" as the opening lecture of the New Year's Conference of the Green Academy of the Heinrich Böll Foundation. This written version is supplemented by notes, references and a recent addition on the Corona crisis. I would like to thank Mona Neubaur, Ellen Überschär, Peter Siller, Ole Meinefeld, Ute Brümmer, Christine Weiß, Willfried Maier, Rebecca Harms and the other participants of the New Year's Conference for their suggestions and discussions. The usual disclaimer applies: Remaining errors are my responsibility. *The author also requests indulgence for the present English version. It was written in great haste and exhibits more than one clumsy formulation or stylistic blunder.*

Introductory remark

This talk was delivered on 14 February 2020. It is now published as a discussion paper on 20 March 2020. Five weeks ago – in quite a different time. In the middle of the corona pandemic and at the beginning of a severe economic crisis, publishing a paper on long-term effective investments in the future and the sustainability of financial policy suddenly looks out of date. At first glance.

Five weeks ago – in quite a different time.

Of course, it is never outdated to talk about the future. And of course, we have to deal acutely and above all with the burning issues of crisis management. With the up-to-the-minute postscript “Future investments in the in times of the Corona-pandemic”, I would like to shed light on the relationship between the short- and long-term challenges. The scale of the acute tasks is immense. But the damage from the current crisis will be even greater if it is played off against the structural tasks of the future. Here we can learn from the mistakes of the last economic crisis.

Future investments in the in times of the corona pandemic

The script of the talk from February is reproduced here essentially unchanged. In part, it contrasts with the following comments on fiscal policy in the Corona crisis. In other parts, it fits remarkably well. Ultimately, both parts look at the two sides of the same coin. Our tasks for the future will not disappear because we have to take acute care of the epidemic. The challenges have become considerably greater as a result, and our problem-solving capacities are even more required. The paper shows how we can take a holistic view of the responsibilities that have grown so dramatically – and then tackle them.

Future tasks do not disappear because we have to take care of the corona epidemic

On investment and infrastructure

Thank you very much for the invitation and the honour to open the Academy's New Year's Conference on “Infrastructure, Sustainability and Long-term Investments”.

For the introduction, I brought a picture from North Rhine-Westphalia. Here we see the “So-da bridge” at the edge of Frohlinde, a district of Castrop-Rauxel. “So-da” – German for “just there” – is, as you know, the unofficial technical term for buildings that just stand there without serving any purpose.

The So-da bridge at Frohlinde…

Frohlinde's So-da Bridge has waited decades for the completion of the *New Hellweg*, for which it was built in 1978. But it has also been clear for a very long time that there is no need for this bridge on the expressway. Just the day before yesterday, on 12 February 2020, the Ruhr-Nachrichten newspaper once again asked: “So-da bridge: It's ugly and pointless – when will it finally be removed?” Of course, beauty is in the eye of the beholder.

Some may still attribute a certain brutalist charm to her. In the traditional sense, she certainly is not a beauty.

For today, I am really glad it's still standing. Because with the So-da Bridge, we can get a good idea of what infrastructure and public investment really mean. Good and bad aspects alike.

…illustrates infrastructure and investments

The first question that can be asked with the So-da-Bridge is: Which future are we planning for? Here, in 1978, plans were obviously made for a future that did not materialize. Such an unused bridge is always also a reminder to be humble when we start to rely too much on long-term planning of political tasks. Yet, that does not release us from the duty to look ahead: So what kind of modernisation will we – as of 2020 – need? Do investments and infrastructures play a special role in this? How uncertain do we think these future expectations are? We will have better, but certainly not complete answers to these questions at the end of the conference.

Which future are we planning for?

But before we do so, we ask very down-to-earth questions, again with a view to the bridge in Castrop-Rauxel, what we are talking about when we talk about investments and infrastructure. From the perspective of public finances, investments are defined by the Federal Budget Code, the *Bundeshaushaltsordnung* (BHO), as: expenditure on construction (excluding military installations), the acquisition of immovable property and the purchase of movable property, provided that these cost more than 5,000 euros per unit. This investment concept is about the increase of the physical state assets. Therefore, subsidies and allocations to other local authorities that serve the same purposes are also included in this definition.[2]

Investments: More than 5000 Euro

The penultimate debt limit of Article 115 of the Basic Law prior to 1969 was property-bound so that the additional state debt was matched by tangible, additional state assets. As classic "concrete gold" the So-da-bridge would also be such an investment.

By their very nature, *infrastructures* are substructures and public pre-provision. Economic and social activities take place on this basis. At first the term was used in NATO for airports, barracks and the like.[3] Nowadays we refer to many things when we talk about infrastructure. The network character of traffic and communication infrastructures, for example, is often in the foreground. Frequently, this is accompanied by a natural monopoly – in other words, public provision is more efficient than market competition. In addition to the network character, which is important in economic terms, it is becoming increasingly clear that public spaces function as essential infrastructures for democratic participation and social cohesion.[4]

Infrastructure: Of NATO, networks and public spaces

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[2] Expenditures to increase *financial* assets are also included in the investment definition of the BHO, i.e. purchase of securities, loans to third parties, investment subsidies to private individuals and similar. However, in the context of this paper, this is of secondary importance.

[3] See. R. L. Frey: *Infrastruktur*, in: HdWW Vol. 4, Stuttgart, 1978, p. 200-215.

[4] See the contributions of P. Siller, H. Bude, M. Thöne and others in: H. Böll Stiftung (ed.): Ö*ffentlicher Raum! Politik der gesellschaftlichen Teilhabe und Zusammenkunft*, Campus Verlag Frankfurt/New York 2020 (forthcoming).

Infrastructures and investments are not identical in terms of concepts and in practice, but their overlap is large. What they have in common is that their financing and their public benefits do not coincide in time. The present-time financial effort is contrasted with future benefits distributed over a longer period of time. This is where the underlying political investment problem arises: high expenditure is initially only offset by a partial, often low political "return". The situation is different for consumptive spending. Consumption expenditure unfolds its full benefits for society and the economy directly with the government money spent on it. For policymakers, this means an immediate and complete political return. The argument here is that government spending on consumption – for example, additional social benefits – is easier to convert into votes than investment, which is expensive and only slowly becoming perceptible. Well, in reality, in recent years some German parties have not been able to earn a "vote yield" even with large social benefits as election gifts. But it is precisely the *surprise* at such unexpected failures that gives a good evidence that the political calculation of this very common, which favours consumer spending and hinders investment.

The political handicap of investment

To sum up, public infrastructure and investment are very important for the functioning of the economy and society. But in political competition – and thus also in the public budget – they sometimes suffer a handicap.

Not all that is good is an investment

However, not only physical national assets and infrastructure provide long-term benefits for the future. Not all that is good is an investment. And not everything made of concrete has a long-term benefit. Our So-da Bridge is the prime example here.

And not everything made of concrete has a long-term benefit

Future expenditures – we often speak somewhat tautologically of *future investments* – are also found in the fields that are classified as consumption expenditures according to the Budget Code. The full public benefits of spending on education only pay off in the long term. The same applies to climate protection, research and development, health and family policy, non-discrimination and inclusion, ecological restructuring and defence.[5] Also, spending on public spaces, on social and democratic participation is not always an investment in physical infrastructures. A public sphere perceived as shared and inclusive, without filter bubbles and free of hired or

Future investments in many areas

[5] Actually two phenomena have to be distinguished: On the one hand, government expenditure with a clearly measurable long-term effect on productivity and growth. Overviews of the empirical literature are provided by M. Thöne and F. Krehl (2015) (2015), *Zukunftsinvestitionen. Empirische Befunde zur Wirkung öffentlicher Ausgaben auf inklusives Wachstum*; Bertelsmann-Stiftung, Inklusives Wachstum für Deutschland 03/2015, Gütersloh; and by M. Hüther and J. Südekum (2019), *Die Schuldenbremse – eine falsche Fiskalregel am falschen Platz*, in: Perspektiven der Wirtschaftspolitik 04/2019. To be added to these are expenditures that also have a long-term effect but whose impact on social or economic variables is difficult to measure due to the lack of a "counterfactual" situation. This category includes, for example, the defence policy measures mentioned above.

self-proclaimed "trolls", is a high good that must be actively guaranteed and contributed to by the democratic state. Such a public sphere is vital infrastructure for democracy – and often more immaterial than physical infrastructure.

The fact that it is not only public investment that creates longer-term benefits is not something new. In the past, it has already inspired initiatives for the structural modernisation of fiscal and budgetary policy. Fifteen years ago, under the heading "Quality of Public Finances", we had an intensive discussion at both national and EU level.[6] The aim was to overcome the traditional fixation on concrete in the investment debate and to anchor a sound understanding of forward-looking policies in public finances. Growth- and sustainability-effective expenditures (*Wachstums- und Nachhaltigkeitswirksame Ausgaben – WNA*) were to be given a prominent role in public budgets. At the same time, public budgets were to be modernised with a stronger focus on outcomes: Instead of measuring the success of a policy measure by how much money is spent on it, the focus must increasingly be on what it achieves. This emerging movement for a fundamental reform of public finances in the EU and OECD member states has never been easy. More long-term orientation, more accountability, more rationality – in processes that are often characterised by day-to-day policy options, this type of reform has many opponents.

Key initiatives for the quality of public finances…

This reform discussion was then washed away by the global economic crisis after 2008. In the crisis, the political focus immediately turned to averting the collapse of the financial system, to counteracting the subsequent recession in the real economy, to saving some EU states from insolvency, and to bringing the Euro unscathed through this purgatory. Looking back, we in Germany sometimes tend to underestimate the drama and duration of the crisis in Europe at the time: Mario Draghis famous "Whatever it takes" was only made in the middle of 2012. Even then it was still necessary.

…were washed away by the world economic crisis

In the acute crisis, there was no more room for the *quality of public finances*, no more room for the reform movement towards more future-oriented and results-oriented public finances policy. In the beginning, the change of focus was a self-evident necessity. Now, it was all about "fast", it was all about "a lot". That only works if you don't look too closely. In any case, no one would have demanded that economic stimulus packages be used in a context geared to sustainability and accountability. "Leave us alone, we need to spend money!" – Such a phrase was easy to accept at the beginning. After the acute phase had subsided, it was soon transformed in some EU countries into: "Leave us alone, we have to save!" The only thing that stuck was "Leave us alone...!" Fiscal policy was again all about the simple quantitative aspects. Qualitative aspects, questions

"Leave us alone, we need to spend money!"

[6] See A. Afonso, W. Ebert, L. Schuknecht and M. Thöne (2008), *Quality of Public Finances and Growth* and the further contributions in S. Deroose and C. Kastrop (Hrsg.): *The Quality Of Public Finances*, Occasional Papers 37, 2008, European Commission, Directorate-General for Economic and Financial Affairs.

about the sustainable and/or investment character of government spending, no longer played a role. The mistake of abandoning this reform discussion during the crisis – instead of temporarily postponing it – is still affecting us today. For the relevance of qualitatively more differentiated, future-oriented policies and public finances has of course not declined, it has increased with and after the crisis.

The global economic crisis and the subsequent European sovereign debt crisis have triggered the decision to amend the Basic Law in Germany and introduce the "debt brake". This is essentially a simple quantitative rule. The decision was not only crucial for Germany; it also sent an important signal to our European partners. In macroeconomic terms, the European Monetary Union had always suffered from the fact that, although monetary policy was integrated, fiscal policy was only coordinated very weakly. In order to regain the confidence lost in the sovereign debt crisis, the European Fiscal Compact of 2012 had to set the limits for deficits and debt accumulation much stricter than the original Stability and Growth Pact of 1997. The political anchor for the Fiscal Compact is the German debt brake, which was adopted in 2009 in the shadow of the consequences of the Lehman collapse. This European policy proviso continues to apply: whether we like it or not, we can only talk about German fiscal policy within the framework of our European responsibility. Sadly, this is frequently overlooked in the discussions here in Berlin. However, our European partners are watching very attentively at this point.

The German Debt brake was an anchor for Europe

With the debt brake of Article 115 of the Basic Law, we now have a simple numerical rule for limiting deficits, the observance of which means that the national debt must gradually decline. This has also been achieved in Germany. In just ten years, total German government debt has fallen from 81 percent of gross domestic product to less than 60 percent. Historically low interest rates, a sensational tax boom and the unwillingness to cut taxes have made it even possible to surpass the requirements of the debt brake. Six times in a row the federal budget has closed with a surplus up to and including 2019. This was more than a "black zero" and still more than the cyclically adjusted deficit of 0.35 percent of GDP allowed to the federal government by the debt brake.

Debt reduction turned out well

Good times for investments and infrastructure? Not necessarily. Because with the debt brake we don't have a fiscal rule that allows us to finance investments with new debt. In other words, we do not have the famous "golden rule" of intergenerationally fair fiscal policy. Ideally, debt financing would make it possible to bring the long-term benefits of investments into line with their long-term funding. The so-called pay-as-you-use rule involves all users of an investment, present and future, equally in its funding. Because the fiscal burden does not occur entirely at the outset, a golden rule also reduces the handicap of investments in the short-term oriented political process.

But not a golden rule of investment financing

The debt brake is not the cause, its abolition is not the solution to the problem

So now, we have the debt brake. And we also have an unresolved crisis in public investment. For a long time we have neglected public investment so much that in most Länder and local authorities we no longer even have the planning capacity: At first, no more investments were made. Then the staff that plans and manages investments was also cut back. Back then, this was quite different with the Frohlinder So-da Bridge.

Investment crisis is not over

Nevertheless, when discussing future tasks and future expenditure, I would advise against making the mistake of focusing too much on the debt brake. At best, it is only part of the problem. Accordingly, we are only gaining part of the solution here. The fact that the debt brake cannot be to blame for the investment problem can be illustrated by two simple facts.

Debt brake not to blame for investment problem

Net public investment – i.e. investment minus the loss in value due to wear and tear and obsolescence – has been declining in Germany for a long time, and from 2003 onwards, it was even negative for a long time. In other words, investment had even fallen below the level that would have been necessary to maintain the simple use value of the stock. Only since 2017 has this trend been broken thanks to concerted efforts by the federal and Länder governments. It remains to be seen how sustainable this trend, which has been given an extra boost by temporary stimulus packages, will be. The debt brake came much later. It has been in effect for the federal government since 2016, for the Länder even only since 1 January 2020. Of course, the federal and Länder governments have already prepared for the debt brake in their budget policies of previous years. Whether or not they like the debt brake, however, it must be noted: It did not cause the investment crisis. This occurred under the old deficit rule of the Basic Law, which was introduced in 1969 and was actually quite investment-friendly (and lax).

Investment crisis is older than the debt brake

Secondly, the investment crisis is most severe among municipalities. Even today, their net investments are still negative. The Kfw Municipalities Panel of the German Institute of Urban Affairs shows an investment backlog of EUR 138 billion for the local level by 2019. But local authorities are not subject to the debt brake at all. They can take on debt for investments on a regular basis. In fact, in the Doppik, the accrual accounting of almost all German municipalities, there is not even the large initial burden of investment expenditure. Here, the investment expenditure is compared with the corresponding increase in assets. The balance-sheet becomes longer, but the balance is unchanged. The investment expenditure is distributed as depreciation over the lifetime – that is the golden rule pay-as-you-use in practice.

Local authorities have the highest investment backlogs, but always a golden rule

In other words, the investment crisis is considerably older than the debt brake. Municipalities have never had a debt brake; they have always been allowed to borrow for investments and are still allowed to do so. Nevertheless, they are the ones with the greatest investment arrears. The debt brake is not the cause, its abolition is not the solution to this problem.

This does not mean, however, that the debt brake should be necessarily maintained in this form. It is not to blame for the investment crisis. But it is also not helpful in overcoming it. Especially now that Germany – favoured by the macroeconomic environment – has so quickly fallen below the debt limit of 60 percent of gross domestic product, which is important under European law, we can further develop the debt brake into a golden rule oriented towards net investment. Technically, this will not be easy. Such an investment-oriented debt brake must be manipulation-proof and transparent. It must, of course, include special rules for economic crises, disasters and exceptional emergencies. And – and this will be the most difficult part – it must be reformed in the European context, because the fiscal Compact, which also needs to be improved, must run along similar lines.

An investment-oriented debt brake for the future

In view of the in this respect praiseworthy *Doppik*, it seems sensible to combine the European reform with the already ongoing discussion on the "European Public Sector Accounting Standards" (EPSAS). By harmonising public accounting systems throughout Europe, states can be compared with each other on a reliable data basis and their fiscal rules can be better adapted to each other. EPSAS can provide similar rules for the federal and Länder governments as the accrual accounting does for local authorities. It is also a European process that we will have to face sooner or later in any case. Germany has always been very reluctant to take part in this process. But now, together only with the Netherlands, it stands alone. Almost all EU states already use accrual accounting; harmonisation must move in this direction. However, lately it seems to be dawning on more and more stakeholders in Germany that we'd better take an active part in shaping this discussion as long as there is an opportunity to do so.

Use EPSAS to implement the benefits of accrual accounting for the debt brake

Mañana, mañana…

But, I repeat, a better fiscal rule alone does not solve the larger problem. Because our problem is not that we *cannot* spend the money on the future. A look at the facts of public budgets shows that we obviously *do not want to* spend it on future tasks. More specifically, that we have more future tasks than we mobilise resources for. In addition, there is a strong tendency towards present tasks – a so-called *present bias.* At the same time, more and more fiscal burdens arising from obligations decided in the past without having been fully financed at the time are emerging today.

We obviously do not want *to spend it on future tasks*

By this, I do not at all imply that future-oriented tasks and the associated expenditures are always economically better or fairer than present-oriented ones. Well, for some it is quite clear. We still remember the opportunistic race between the "mothers' pension" and the "pension at 63" of

Expensive present bias

2014 and the grand coalition compromise to introduce both. In the federal budget, it is steadily increasing subsidies to social security. In the Länder, on the other hand, expenditure on pensions for staff who became civil servants during the educational expansion of the 1970s and 1980s is growing from year to year. Meanwhile, in the cities and rural districts, the annual increases in social security spending (actually initiated by the federal government) reliably exceed expectations every time, and then often enough the budget.

Much of the growth of present-oriented social tasks in particular is good and necessary. Just think of the many improvements in youth assistance, which were long overdue. Take the massive expansion of early childhood care. This is also a good example of how present and future-oriented aspects converge. Expenditure on childcare or on parental benefits is very much a matter of the present, with its effects on the labour market and as a substitute for income. But at the same time, of course, child-oriented family policy is always partly an investment in the future – especially in a country undergoing demographic ageing.

Present with a splash of future

The fact that Germany is a rich country also contributes to the present bias. Rich countries like to react to conflicts with money. As a modern country, we are facing up to the profound, double change that sustainability and digitalisation require. As a rich country, we like to moderate these transitions by compensating the expected losers of the changes. To some extent, this is inevitable. First in the nuclear phase-out, now in the coal phase-out, certain legal claims for compensation must be recognised. But rich countries have a tendency not to stop at such points. At least where sectoral or regional interests are well represented on the political scene, tax money will continue to be given until the protest of those affected by the change is silenced. Often enough, however, the impetus for change itself will also suffer from compensatory policy.

Rich countries respond to conflicts with money

Complex societies in transition generate many-voiced demands on the modern state. This results in demands on all four levels, the municipalities, the Länder, the federal government and finally the European Union. The main task of politics is to reconcile the multitude of demands, i.e. to reconcile them with the – even in a rich country – *limited* public resources, and finally to do the important things and not do the less important things. In this balancing of priorities – this is not new – "the future" has a weak voice. This voice is by no means quiet – the "For Future"-movement proves the opposite not only on Fridays. But it is still weak when it comes to not only formulating one's demands for resources, but also to enforcing them.

The voice of the future is loud – but weak

Of course, we are no longer in the 1980s. The call for sustainable and socially balanced development, the call for global and intergenerational fair use of resources is no longer rejected as a romantic crank. More and more companies are being screened for sustainability on the basis of ESG criteria. In the government sector, future goals are being given the highest recognition as UN Sustainable Development Goals (SDG). A completely dif-

SDG and ESG: A nominally high level of recognition ferent question, however, is whether future concerns are also fully reflected in the actual decisions – i.e. backed by budget funds – as they deserve to be considered at least on an equal footing.

Above all, this must also apply to necessary, but politically less attractive future investments. For example, many local water and wastewater companies are reporting major investment backlogs. It is true that no one would question the high value of a well-functioning water supply and disposal system. But when it comes to making decisions, the motto for these infrastructures is often "Out of sight, out of mind". This also applies – albeit with a much clearer *desire not to see* – to the still more than sobering state of the German armed forces' material and equipment. Even if the so-called "material operational readiness" still looks tolerably okay at 70 percent on average, it is already down to 26 percent, especially with new systems.

Politically unattractive future measures are difficult to implement

On closer inspection, we discover more areas in which the fundamental importance of long-term investments is recognised, but where practical budgetary decisions look more like "mañana, mañana...": Future actions are repeatedly postponed to tomorrow. However, many isolated observations are not sufficient to provide a complete and balanced picture of the distortion that still places future tasks at a disadvantage compared to current tasks.

Needed: A balanced picture of future and present tasks

This question, as we have seen, does not relate solely to physical infrastructure and investment. In this respect, even an investment-based debt brake, as a golden rule, cannot do the job entirely, but it can help. On the other hand, in normal economic times it cannot be a question of funding the whole spectrum of expenditure, which also has positive effects on the future, by means of new debt. Suppose we were to finance educational expenditure from kindergarten to the final university degree by debt. Because, empirically speaking, such spending is very growth enhancing. Educational expenditure has always been the prime example that not only investments in concrete are productive government expenditure. Thinking it through, credit financing would make sense, wouldn't it? When even our So-da-Bridge was financed by credit?

Debt-finance for education?

But no one would seriously suggest such a thing. It's not just that the dimensions make you dizzy. In North Rhine Westphalia, for example, education, science and research account for more than 35 percent of annual state spending, just under 30 of 80 billion Euros. I also doubt whether the consequent reversal of the burden of proof would really correspond to our concept of education: Do we want to measure our education system by whether the work of every teacher and professor contributes daily to how much stronger economic growth and tax revenue will grow in the long term? I do not think so.

We do not want the consequences for the educational system

Well, this is just a thought experiment. It is already the case today that taxpayers must finance the salaries of their old teachers and professors: expenditure on pensions and health benefits for retired civil servants is currently growing extremely dynamically, especially in the state budgets

Today: co-financing via implicit debt

in the West. To a large extent, as already mentioned, this is due to the expansion of education in the 1970s and 1980s. While not through explicit indebtedness, education spending was partly postponed into the future through uncovered pension obligations, i.e. through implicit indebtedness. However, this is not limited to education, but is a general phenomenon in the pension scheme for civil servants.

This brings us back to the question of the balance between the demands of the future and the present on public budgets. Partial instruments such as a golden rule naturally offer only partial solutions, as we have seen. The comprehensive balance between demands of the present, the future and also from the past can only be assessed for a public budget in terms of its long-term sustainability. A properly prepared sustainability analysis provides a balanced financial reflection of all these demands on the government. First of all, one looks at whether the current fiscal policy, including all obligations assumed in the past, could be extrapolated into the changing future. For Germany, the focus here is on demographic change, the social security system – pensions, health, long-term care -, explicit and implicit old debts and any interest rate risks. A sustainable fiscal policy is one that can be extrapolated into the changing future over several decades without producing a protracted wave of future burdens in the form of steadily rising debt.

Fiscal sustainability concept provides the necessary overall picture

Every three to four years, the Federal Ministry of Finance submits such a sustainability report for the whole of Germany as a kind of early warning system. In the last few rounds we have always had to acknowledge a significant "sustainability gap", i.e. even the current policy patterns would not be sustainable without additional money (or savings) and would therefore not be future-proof. The fifth sustainability report of the Federal Government is published this March. We can be certain that despite all the surpluses of recent years, there is still no question of the long-term sustainability of German public finances. In fact, according to this latest report, the long-term sustainability gap – as a financing gap in the theoretical general government budget – is up to 4.1 percent of gross domestic product per annum for Germany. Up to 140 billion euros are missing every year simply to be able to continue as before.[7]

5th Federal sustainability report: Gap of up to 4.1% of GDP

This puts the question of future tasks in the right perspective of a long-term overall picture. However, this is not enough to demonstrate genuine sustainability of public finances. Any additional investments needed for the future or the closing of investment gaps from the past are not yet included in conventional sustainability considerations.

Investment gaps and investments in the future are still to be added to this

Progressive cities like Cologne and Karlsruhe (where it is still "work in progress") go one step further. Building on the long-term sustainability of the city budget, investment and infrastructure are also included here – both in

[7] Diese aktuellen Zahlen wurden in der Durchsicht des Redemanuskripts auf Grundlage des gerade erschienenen *Fünften Berichts zur Tragfähigkeit der öffentlichen Finanzen* (BMF, 11.03.2020) übernommen bzw. berechnet.

terms of investment backlogs from the past and enlargement investments in a growing city. Public enterprises and municipal holdings, which are so essential for municipal services, are also included here. This is the concept for "materially sustainable" municipal finances.

Materially sustainable municipal finances

Given the above, it is not surprising that such a comprehensive view usually reveals sustainability gaps that are larger than current fiscal balances – be they deficits or surpluses. For Cologne, for example, the sustainability gap in 2018 was almost 10 percent of the budget. New information for additional future tasks must be additionally included; strategic scenario calculations serve this purpose.

Now, nobody should be paralysed by sustainability gaps that at first glance appear very large. It is true that structural trends are projected for 25, 40 or even more years. But of course the future is still open and can be shaped by us. We must, however, honestly consider how big this design task is likely to be.

Don't be paralysed by sustainability gap

For this purpose "sustainability thinking" helps in two ways. On the one hand, it makes it unmistakably clear that even today the financial demands on public budgets, which we have formulated in the past and present and which continue into the future, do not go together in a regular budget. We are pushing a protracted wave of burdens ahead of us which, if nothing is done, will materialise in public budgets in the coming years. But the sustainability gap gives us a criterion for how much would have to be done to achieve sustainability and generational fairness.

Sustainability thinking

On the other hand, sustainability thinking forces us to put our additional – mostly very necessary – future plans into their real overall context. Public finances play a major role here. For in one view, intergenerationally fair, long-term sustainable finances of my municipality, my Land, my country and the EU are only one of many dimensions of what constitutes overall sustainable development in the sense of the UN Sustainable Development Goals (SDG) and also of the German sustainability strategy. But most sustainability goals can only be communicated and implemented jointly – i.e. politically and nationally. This means that the capacity of politics and the state is central to this process in society as a whole.

No overall sustainable development without sustainable finances

It can only be based on sustainable public finances. After all, sustainable development does not just mean identifying and agreeing on new and sensible goals. You also have to be able to achieve them. To do so, you have to reconcile everything under one budget ceiling. And this ceiling cannot be raised at will. So if we want to avoid that the necessary goals for future investments and sustainable development get stuck in the same "mañana, mañana", we must look at the present and seek confrontation here.

Confronting the present bias

…and how it can be done

If our problem has much to do with the in a great present-bias of mainstream politics. If too much of what is considered postponable by mainstream politics – be it a physical investment or another future-related task – is actually postponed. Where is the solution?

Where is the solution?

In my view, we are not lacking qualitative knowledge of what we need to tackle for the future. Of course, the future is uncertain by its very nature. And some basic questions are quite unforeseeable. Currently at the top of the list of open questions for me: "Does artificial intelligence make us all happy? Or superfluous? (Or both?)"

But even the conceivable list of requirements is well filled: Digital restructuring, mobility transition, energy transition, climate protection, food transition, resource revolution, the decoupling of prosperity and resource consumption. At this New Year's Conference, we will also talk a lot about social inclusion and public spaces. And then the other international tasks: Development and migration and a consistent Africa policy. And, let's be honest, in today's multipolar world we Europeans will also have to spend much more on our future security – regardless of the name of the next US president. And there are still major tasks beyond external security: Europe must become much stronger and more sovereign, both internally and externally, if it wants to maintain its place in the world in line with its cultural, economic and ethical identity.

We see many tasks for the future

A really big transformation is ahead. If we embrace it. It requires courage on two counts. First, courage as a willingness to take risks. Because, of course, investing in the future is risky. That can go wrong sometimes. Then you have a so-da-bridge in your integration policy, in your climate protection or in your research policy.

Courage I: Willingness to take risks

But even more courage – i.e. a willingness to conflict – is needed in the competition with present-day spending. With limited overall resources, each new priority also entails a "posteriority". Easy to say, hard to do. Of course, it is good to call for courage here. Better still, not to rely on courage alone. Therefore, in conclusion, a few key points about the steps that can be taken to bolster courage and thus support the courageous:

Courage II: Willingness to conflict

- Learn more about sustainability. The "sustainability thinking" forces us to learn for each public budget in a very tangible way how well or how poorly the various future goals fit into the overall political picture, where things are jammed and how much remains to be achieved. It creates knowledge, thus preventing premature self-complacency, but it can also identify progress very well.

Learn more about sustainability

- Introduce the golden rule in line with European requirements. A deficit rule based on net investment is economically the better solution than the current debt brake. It cannot solve the larger problem of a high present bias, but it does provide some relief. It must be combined with a good arrangement for cyclical deficits and

Introduce the golden rule in line with European requirements emergencies. And at least as important, but often overlooked in the domestic debate: Whether we like it or not, the German deficit rule has great political relevance for Europe, especially for the Eurozone. In its content, but also in its process, a German golden rule must therefore be made "Europe-compatible".

- Set posteriorities and occasionally be malevolent: Every Euro that is used to moderate away present-day conflicts is one Euro less for future tasks. Pension gifts, farmer's gifts, lignite miner's gifts etc. – compromises should not always be so lavish. In general, too, we need to talk more offensively about unfairness, especially in an intergenerational context. The intergenerational conflict is not only taking place on Fridays and not only for climate protection.

Occasionally be malevolent

- Develop revenue opportunities: Polluter-friendly climate protection generates government revenue, not spending. Adaptation to climate change will be expensive enough.

Develop revenue opportunities

- Position future tasks proactively in the budgets. It is not easy for future expenditure to compete with the "fat cats" in the budget process. Everything that strengthens them strengthens sustainability. That is why it is good to be able to identify at a glance whether a new budget is more future-oriented or not. Indicative "future budgets", "WNA budgets" and similar benchmarks help in this process.

Position future tasks proactively

- Improve the political ownership of investment and future spending by accelerating it. We have all seen the pictures of the hospital construction in Wuhan. Two weeks! If we were only one hundredth as fast, we could cut the red ribbon four years after an investment decision was made. I can imagine this again for Germany.

Improve political ownership by acceleration

- Transfer conflictual issues to Europe. Often enough, our own local veto constellations are secondary in the European context. More often than not, such questions are in good hands with a Europe that we need to strengthen both internally (including democratically) and externally.

Strengthen Europe

So, with a last look at our starting picture from Castrop-Rauxel: Let us build more bridges again. Not necessarily concrete bridges. But fiscal bridges into the future through wise investments and more effective action for sustainability.

Build bridges (without concrete)

Thank you very much! I look forward to the discussions today and tomorrow.

Plus postscript of 20 March 2020

Future investments in the in times of the Corona-Pandemic

When this lecture was given in mid-February 2020, only a few people could have foreseen how much the COVID-19 ("corona") pandemic would affect us a few weeks later in Germany, in Europe and globally.

COVID-19

Today we are settling into a new reality in which new decisions have to be made from day to day. Events are being cancelled, schools closed, travel bans imposed, quarantines set up and social contacts minimized. Every day something new is added to counter the exponential growth in case numbers.

A new reality

The paramount goal is to slow down the spread of the epidemic as much as possible so that the health care system is not stretched beyond its limits and as few people in risk groups as possible are lost to the disease. Everything else must be subordinated to this goal, which is based on a spirit of great intergenerational solidarity.

Paramount goal: slowing down the epidemic

Politics is called for in three dimensions here. It must offer the health services whatever is needed to provide optimum care for the sick and infected and overcome bottlenecks. It must regulate and, in case of doubt, prevent anything that could facilitate the spread of the epidemic. Finally, the politics must try to contain and (partially) compensate for the economic damage caused by the epidemic.

Three dimensions of political response

A fiscal policy in crisis mode must first and foremost provide the necessary additional money. In Germany, the federal government, the Länder, and the local authorities need the funds to equip health services in the best possible way. The scarcest resource, however, the time of the doctors and nurses, is – unfortunately – hardly a question of money in the short term. Fiscal policy is more in its domain where the subsequent economic damage in the affected sectors and for the economy must be counteracted.

Fiscal policy in crisis mode

Money is not a problem in this situation. The question regarding the balanced budget – the so called the "black zero" – was only asked in the first days of the Corona crisis. Actually, the answer was obvious from very beginning. The "black zero" was a temporarily useful marketing instrument for the debt brake. It had only limited contact with it. In the debt brake – i.e. in Article 115 of the Basic Law – the case is clear. The annual deficit of 0.35 percent of the gross domestic product allowed to the federal government may be exceeded in an economic downturn or "in the event of natural disasters or extraordinary emergency situations beyond the control of the state and which significantly affect the state's financial situation". If – as is the case now –an extraordinary emergency *and* an economic crisis

We're going to incur a lot of debt

occurs, the case is clear: the Bundestag can quite legally provide the necessary funds by means of credit and guarantees. This decision is easy. So we will incur a great deal of debt.[8]

Cushion the supply shock

Fiscal stimulus in Germany is starting with the right priorities. First, help should be given to those who are directly affected by this self-imposed supply shock. First, we must ensure that the economic damage is buffered as directly as possible for those companies and sectors that have been negatively affected. These are different from those we look to first in a "normal" economic crisis, our industry and export sector. The big ones have short-time work benefits, credit lines and generally very good communication. That certainly does not mean that they are already catered for. But the even bigger worries are others. They are the small and smallest companies in the most affected industries. Hotels, guesthouses, restaurants, cinemas, independent theatres, concert promoters. It's not just the airline, it's also the airport bakery. Last not least there are many self-employed people. Due to explicit or, in a short chain of effects, at least de facto bans on activities, many small and micro-enterprises very quickly find themselves in existential distress. To keep them afloat in this situation, they need liquidity and relief. The combination of short-time work compensation, tax deferrals and very extensive guarantees for unbureaucratically fast loans will – hopefully – manage to keep the coming wave of bankruptcies flat. If this fails, it will be because of "unbureaucratically". The first reports on the practice of the commissioned state banks are casting doubt on this. This represents a major risk to the success of the project: Germany's very finicky sense of fairness may lead to rather five companies going bankrupt than for one company receiving rescue funds to which it might not have been fully entitled. This will be the real test for Germany in the first phase of the economic rescue: Not only getting out the "bazooka" – but then also firing without TÜV approval before each shot.

Not only getting out the "bazooka" – but then also firing without TÜV approval before each shot

The second step is to counteract the business cycle crash. Hong Kong now gives every citizen 10,000 Hong Kong dollars unconditionally. That is 1,200 euros "helicopter money" to stimulate the economy. The United States is announcing similar measures. However, one should not expect quick effects from this. What is the Point of passing money to the consumers when they are not allowed out to go shopping? Who would book a holiday trip now? And the idea that everything is flowing into online shopping is not the point of an economic recovery.

Economic stimulus when it can work

When the restrictions on everyday life and economic activity can be eased, it is a good time for economic stimulus. In the meantime, it is certainly better to combat the supply shock and channel even more money directly into the industries and small freelancers and tradespeople who need it.

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8 Das widerspricht nicht der grundgesetzlichen Schuldenbremse. Ihre Notfall-Klausel ist gut gestaltet; beim Hauptmechanismus ist das strittig. Wenn die akute Krise überwunden ist, könnte die Zeit günstig sein, sie in eine *investive Schuldenbremse* im oben diskutierten Sinne weiterzuentwickeln.

So what does this have to do with investments in the future?

Investments in the future?

At first glance, not much. That's the way it should be. The fiscal measures against the corona crisis and its economic consequences are completely different from the issues discussed above with regard to long-term investment and sustainability.

At second glance, we must also actively ensure that it stays that way. Economic policy and a policy for infrastructure and future tasks do not go together. Because if, in the phase of economic recovery, the aim is also to boost demand again, we have to think very carefully about whether it is wise to combine this with investments in the future that are desirable in any case. The idea of killing two birds with one stone is obvious. But it is precisely here that the impulse to act twice as wisely can lead to half as wise results. In the economic stimulus packages from 2009 onwards, we have seen what this leads to. Investment aid to local authorities was partly linked to energy efficiency improvements and/or the creation of barrier-free access. Two birds? Many municipal buildings here in North Rhine-Westphalia were already on the verge of junk property at that time. After the programme, they were junk properties with triple glazing and wheelchair ramps. Real sustainability is something else. And it was bad stimulus policy: the more assiduously the economic revival is targeted using well-intentioned criteria, the slower it becomes and the more it pushes up prices in the then narrow markets instead of achieving volume effects. Anyone who wants to characterise bad stimulus policy briefly will name only these two characteristics: Slow and little volume effects. This is not to say that in individual areas economic stimulus and future tasks may not be compatible. Especially where the sustainability requirement is kept rather low-key and not mandatory, this may be successful. But this will remain the exception.

Don’t kill two birds with one stone

Thirdly, it is also necessary to distinguish between the now acute economic challenges of corona and the longer-term future tasks in order to take *both* dimensions seriously. Currently, everything is focused on the acute crisis – i.e. many of the central activities and almost all public and media attention. This is right and appropriate – especially if it really helps to keep the epidemic in check and to fight the crisis. The problem starts where the monothematic turns into a narrative that the numerous long-term challenges no longer seem important in the light of the crisis. That would be an obvious but false perception. The corona crisis admittedly puts the other problems into proportion, but their overall magnitude is not shrinking. Rather, an additional, very large and acute problem has come *up on top*.

The corona crisis puts the other problems into proportion, but their overall magnitude does not shrink.

Rather, an additional, very large and acute problem has come up on top.

This statement is actually trivial, but important. Not to fight for attention for long-term issues in an untimely moment. But to avoid repeating the political mistakes of the last great economic crisis. I have described above how promising approaches to modernising public finances in order to achieve greater effectiveness, democratic control and intergenerational fairness have been washed away after 2009 by the “Leave us alone, we have to spend money”-attitude. Not by the necessary stimulus measures,

Do not repeat the mistakes of the last crisis mind you, but by an attitude that has sought confirmation – wrongly, in my view – from the policies needed in the short term. It is the attitude that has been described above with the strong present bias of politics. In practice, one encounters this difference as two different types of (fiscal) policy makers. On the one hand, those who readily acknowledge that actions against corona initially obscure the view on long-term policy challenges, but do not displace them. On the other hand, those who take the crisis as an excuse, give in to the old opportunistic temptation of present-biased behaviour, and reject the "impertinence" of being asked to act responsibly also with a long-term perspective. Perhaps these two characters are is just the proverbial two souls that live in the chest of each of these responsible persons. I hope that the fear of such a backlash is exaggerated. Thus, I hope that the experiences from the last crisis will not be repeated. Because – as long as one does not see this crisis as an apocalyptic "Meteorite! Get Bruce Willis!"-scenario – one fact cannot be denied: The short-term nature of acute crises does not negate the responsibility for long-term planning and action.

Because, fifthly, in the end, the corona crisis and future investments will have a great deal to do with each other. We are at the beginning of the crisis. We do not know how deep it will be, and we do not know how fast and steep a path can lead out again. But we can already foresee two things. In the end, the national debt levels will be very high again. And in the end we will have to save Italy again. (The latter may not happen in the end and will certainly contribute to the former).

The two certainties: High debt and Italian bailout

In other words, at the end of the crisis, the sustainability of fiscal policy will inevitably be much worse. We will have sustainability gaps that are significantly larger because of soaring debt in all public budgets. This calls for stronger "sustainability thinking", i.e. a philosophy which reflects government performance in the overall context of past, present and future needs and requirements. In one way or another, the resources, but also the energy for political action, which are used for acute crisis management will influence the ability to deal with the other challenges of the future. The pessimistic view is expressed in the sustainability gap that will have grown initially. The wider gap shows that the capacity to solve problems will have declined – poor prospects for future tasks. The optimistic view is expressed in what sustainability reviews are *aiming* at After all, such comprehensive assessments, with their sustainability gaps, are not intended to simply indicate that we will be worse off in the future. They say: *If we do not change anything*, things will get worse. The long-term perspectives must not *frustrate*; they are intended to *motivate*. They should motivate us to make changes and modernise in order to achieve sustainability and, on that basis, intergenerational fairness and sustainable development.

Fiscal sustainability will be far worse. Sustainability thinking will become much more important

Whether the pessimistic or the optimistic perspective prevails remains to be seen. It depends on all of us, on our willingness to act and implement reforms. Because we definitely have to do more for the optimistic perspective to win. And it depends on our resolve to set the right priorities in a monothematic period, but not to become monomaniacs and not to turn our eyes away from the many tasks that lie ahead of us – in the short and the long term.

Optimists are not monomanics

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